

REMARKS

Claims 1-3, 5-8 and 32-41 are pending and under consideration.

Claims 1 and 32 are the independent claims. Claim 5 has been amended. Claims 9-11, 13-19, 21-24, 26-29 and 42-47 have been cancelled without prejudice to or disclaimer of the subject matter recited therein.

No new matter is believed to have been added.

I. SPECIFICATION

Information contained in any one of the specification, claims or **drawings** of the application as filed may be added to any other part of the application without introducing new matter. MPEP 2163.06. (Emphasis added). It should be noted that amendments to an application which are supported in the original description are NOT new matter. MPEP 2163.07. Further, rephrasing of a passage does not constitute new matter. Accordingly, a rewording of a passage or terms where the meaning remains the same is permissible. *In re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973). MPEP 2163.07. Thus, the rephrasing of the description of the lines (e.g., 1-4) shown and described as being diagonal does not constitute new matter since the subject matter is depicted in at least FIG. 2B.

II. REJECTIONS UNDER 35 USC §112

A. Claims 1-3, 5-8, and 32-41 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

Generally, the requirements of 35 U.S.C. §112, first paragraph, are that the written description demonstrate to one of ordinary skill in the art that the inventor is in possession of the invention itself. Union Oil Co. v. Atlantic Richfield Co., 54 USPQ2d 1227, 1232-33 (Fed. Cir. 2000), In re Hayes Microcomputer Prods., Inc. Patent Litigation, 25 USPQ2d 1241, 1245 (Fed. Cir. 1992). Since the exact terms of the claim need not be used in the specification, the claims must have an equivalent structure in the specification as evidenced by the "words, structures, figures, diagrams, formulas" in the specification, and this equivalent structure must be directed to the invention itself and not what is merely obvious in light of the specification. Lockwood v. American Airlines, Inc., 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). The focus in determining this equivalence is on the understanding of the specification by one of ordinary skill in the art. Id.; In

re Hayes Microcomputer Products, Inc. Patent Litigation, 25 USPQ2d at 1245-46. As such, the requirements of 35 U.S.C. §112, first paragraph, are not that all details of an invention must be put forth in the written description using the same descriptive terminology, but instead whether the written description provides sufficient details of the invention such that the disclosure "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." In re Hayes Microcomputer Products, Inc. Patent Litigation, 25 USPQ2d at 1245 quoting Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, 1116 (Fed. Cir. 1991); see, Union Oil Co. v. Atlantic Richfield Co., 54 USPQ2d at 1233.

It is respectfully submitted that one of ordinary skill in the art would understand that the lines shown in FIG. 2B and described in the specification (though without explicitly using the term "diagonal") at least in paragraphs 0027-0030 and 0047 are clearly "diagonal." The term "diagonal" is simply a term that describes that which was shown in the original drawings using different descriptive terminology. Thus, applicants respectfully submit that claims 1-3, 5-8, and 32-41 fully comply with the requirements of 35 U.S.C. § 112, second paragraph and do not contain new subject matter.

III. REJECTION OF CLAIMS 1-3, 5-8 and 32-41 UNDER 35 USC §102(e) IN VIEW OF NODA (US Patent No. 6,216,245)

Applicants respectfully traverse this rejection for at least the following reasons.

Independent claim 1, recites, dividing each of a plurality of error correction code (ECC) blocks corresponding to the data into a plurality of partitions which are formed by dividing each ECC block in row and column directions and interleaving the data from the plurality of the partitions so that partitions from each of the ECC blocks are alternately selected such that progression through the partitions of each ECC block occurs diagonally to generate a first recording block.

As a general matter, in order to establish a prima facie obviousness rejection, the Examiner needs to provide both the existence of individual elements corresponding to the recited limitations, and a motivation to combine the individual elements in order to create the recited invention. Both the individual elements and the motivation need to be shown to have existed in the prior art. Should the Examiner fail to provide evidence that either one of the individual elements or the motivation does not exist in the prior art, then the Examiner has not provided sufficient evidence to maintain a prima facie obviousness rejection of the claim. MPEP 2143.03.

Noda fails to teach or suggest dividing each ECC block in both row and column directions and interleaving the subdivided partitions in a diagonal manner. In the Examiner's response to applicant's arguments the sectors of Noda are described by the Examiner as being the partitions of the subject application. However, if that interpretation is taken then there is no way for the interleaving progression as taught by Noda to proceed diagonally as recited in the claims of the subject application. The interleaving in Noda proceeds on a per sector basis, which makes the progression sequential through the sectors of the ECC block. For example, as shown in FIG. 11 after sector 100 from the first ECC block, sector 92 from the second ECC block is taken and then back to sector 101 in the first ECC block. This is a sequential progression (i.e., from sector 100 to sector 101 in the first ECC block) vertically down the ECC block.

Further, the Examiner indicated in the Response to Arguments that "Figure 5 in Noda teaches that ECC blocks whereby each ECC block is comprised of 208 rows and 182 columns of data and parity, the last 10 columns of the ECC block and the bottom 16 rows of the ECC block being parity and Figure 6 in Noda teaches that row parity is redistributed in the ECC block to form 16 partitions, each partition comprising 13 rows and 182 columns of data," on the ground that Noda teaches dividing each ECC block in row and column directions. However, referring to Figure 5 in Noda, this is only dividing the ECC block in a row direction such that outer parity having 16 rows on the bottom of the ECC block is redistributed in the ECC block. Referring to Figure 6 in Noda, *the inner parity having 10 columns arranged in the column direction in the ECC block is not divided* and is maintained in its previous state. Thus, the feature recited in the claims of the subject application of dividing the ECC block in the column direction, besides in the row direction, is never disclosed in Noda.

Accordingly, Applicants respectfully assert that the rejection of claim 1 under 35 U.S.C. § 102 (e) should be withdrawn because Noda fails to teach or suggest each feature of independent claim 1, such as for example, the division in the column direction.

Independent claim 32 recites, generating a plurality of error correction code (ECC) blocks, the ECC blocks comprising the data; dividing each of the ECC blocks into a plurality of partitions; interleaving the data from the partitions, comprising alternately selecting the partitions of each of the ECC blocks along diagonal paths; modulating the recording block; and recording the modulated recording block on a medium.

For the reasons as set forth above, it is respectfully submitted that Noda fails to disclose all the limitations of claim 32. The Examiner states that the sector of Noda is a partition as recited in the subject invention, however, assuming for arguments sake that the partition and the

sector are related, the progression by interleaving in Noda according to sectors does not flow in a diagonal line. The delays in Noda do not progress through the individual ECC blocks along a diagonal line, rather this simply adjusts the output of data from each different ECC block.

Looking at FIG. 7, for example, the progression through the circuit is not shown to be diagonal for an individual ECC block. The data in the sectors is not interleaved such that a diagonal progression occurs. The progression as shown in FIG. 8 occurs sequentially in a given ECC block by sector and the delays simply stagger the next ECC block (e.g. a sector from Block A is followed by a sector from Block B).

Furthermore, Applicants respectfully assert that amended dependent claims 33-39 and 40 are allowable at least because of their dependence from claim 32 and the reasons set forth above.

Furthermore, Applicants respectfully assert that dependent claims 2-3, 5-8 and 41 are allowable at least because of their dependence from claim 1, and for recitations therein. For example, amended claim 5 recites that the plurality of partitions are generated such that each of the partitions includes a same number of rows and columns.

IV. CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Applicants submit that this Amendment After Final Rejection clearly places the subject application in condition for allowance. This Amendment was not earlier presented, because Applicants believed that the prior Amendment placed the subject application in condition for allowance. Accordingly, entry of the instant Amendment as an earnest attempt to advance prosecution and reduce the number of issues is requested under 37 C.F.R. § 1.116.

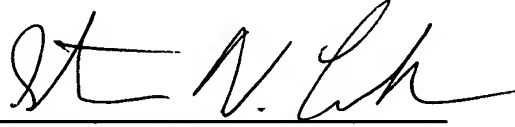
Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action. Finally, if there are any formal matters remaining after this response, the Examiner is respectfully requested to contact the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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